

News Briefs

NASA names new science head

Arnauld Nicogossian has been named associate administrator for NASA's Office of Life and Microgravity Sciences and Applications by NASA Administrator Daniel S. Goldin. Nicogossian manages a national and international program in research and development. Focus areas include life sciences, life support technology, biotechnology, materials sciences, aerospace medicine, occupational health and commercial programs.

Prototype rover completes Mars trek

NASA's newest, six-wheeled prototype Martian rover—nicknamed Rocky 7—has successfully passed its most rigorous field test yet, traveling six-tenths of a mile over rugged, Mars-like terrain, while conducting science experiments and snapping 580 photographs along the way. The week-long series of field tests, carried out May 23-30 at Lavic Lake, an ancient lake bed about 175 miles east of Los Angeles, was designed to simulate several weeks of a real Mars rover mission and to test the rover's ability to drive much greater distances than current rovers. In addition, Rocky 7 conducted five simulated science experiments in real-time and collected samples of soil and rocks that would be retrieved and returned to Earth by a later Mars mission.

Hubble first to spot colliding supernovas

Astronomers using the Hubble Space Telescope have taken the first images clearly showing interactions between two or more exploding stars, called supernova, which are producing a tremendous display in a galaxy 17 million light years from Earth. Debris speeding out from the supernova is slamming together in a cosmic collision, the likes of which have never before been seen.

NASA joins fight against diabetes

NASA's Office of Life and Microgravity Sciences and Applications and the Juvenile Diabetes Foundation are embarking on a cooperative partnership to conduct research that addresses the treatment and monitoring of diabetes and diabetes-related problems. The two parties signed a Space Act Agreement June 8 enabling NASA and the Foundation to initiate joint research activities that will build on the strengths of the two organizations and support their respective goals.

Space News

ROUNDUP

The Roundup is an official publication of the National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, and is published every other Friday by the Public Affairs Office for all space center employees. Deadline for the submission of articles is Friday, three weeks before the desired date of publication.

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Electronic mail adjustment mostly transparent

Electronic mail users and the people with whom they correspond probably began noticing changes last week, but most employees won't be able to detect any difference in their day-to-day activities.

JSC's Information Services Directorate has adjusted the Microsoft Exchange mail system so that it will send out everyone's "generic" electronic mail address.

JSC Postmaster Jennifer Rasnic said the change synchronizes the Exchange mail system with the X.500 directory service at the center. That directory service maintains all of the "aliases" that hide the complexities of addressing messages and make the system easier to use.

The change will make additional identifying information readily available to those addressing messages so they can be sure they are sending to the right JSC employee. Exchange users should be able to look at the "Properties" of the address and see the person's courtesy titles, generational qualifiers, building, room, phone number and organization code.




The change also affects the E-mail address that is sent out when anyone sends mail across the Internet. Previously, the mail system appended an address that looks like `username@ems.jsc.nasa.gov` whenever someone sends a message to someone else. Now, the system appends a generic, X.500 address that looks like `firstname.mi.lastname#@jsc.nasa.gov`.

For example, Rasnic's address will change from: `jrasnic@ems.jsc.nasa.gov` to `jennifer.y.rasnic1@jsc.nasa.gov`.

Exchange users will notice that names in the global address list will be in all capitals, but otherwise everything is expected to be transparent. A small percentage of users may have to adjust entries in their personal address books or distribution lists. A few others may need to resubscribe to things like automated electronic mail lists.

Exchange users who have saved JSC Exchange or Microsoft Mail addresses to their Personal Address Books must delete those addresses. Mail won't be delivered to Personal Distribution Lists that used Personal Address Book with the address format `jrasnic@ems.jsc.nasa.gov`.

Rasnic said the best thing to do is to act as if nothing has changed. Users who are affected should watch for mail that is returned as undeliverable or regular automated E-mail messages that don't appear as expected. If they notice either of these, they should write down the exact message that appears on the screen and contact the Help Desk at x34800 or forward the message to the Help Desk (ITOC) address in the global address list.



JSC Photos 97-07091, 97-07093, 97-07092 by Karen Schmidt

UNWELCOME GUEST—JSC security and maintenance workers eject a squirrel from Bldg. 2. Clockwise from top left are 1) The squirrel sits atop a computer desk. 2) JSC Security Officers Leroy Lance, Stanley Harrell and Lindon Smith scramble to help maintenance worker Sinh Nguyen capture the unwanted guest. 3) Smith releases the squirrel. Nancy Robertson, chief of Public Affairs' Education and Information Services Branch, opened her office door on a recent Monday to discover her office had been vandalized over the weekend. Unsure if the vandal was animal or human, she called security to report the incident. Smith, Lance and Harrell responded to the call. During the report, the officers began looking around the office for clues only to discover a squirrel hiding in a television cabinet. The officers tried to capture the animal but were unsuccessful. A call was made to work control and Nguyen was sent to remove the squirrel. Together Nguyen and the officers captured the unwelcome guest and released him.

KSC payload, shuttle teams work to speed processing

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formance monitor provides a gross indication of fuel cell health, which caused the team to assume the worst in the case of STS-83.

As with all hardware issues on the shuttle, fuel cell anomalies are taken seriously and reviewed extensively prior to clearing future missions for launch. Additionally, the flight rules are being reviewed to ensure that proper insight is provided to flight controllers in making decisions on the health of the fuel cells.

Columbia launched on April 4 and landed in Florida on April 8 without completing the mission's science objectives. About two weeks later, shuttle program managers decided to refly the Microgravity Science Laboratory mission on STS-94 as soon as possible within safety guidelines.

"This decision demonstrated the shuttle program's confidence in the KSC processing team," said Bob Sieck, director of shuttle processing. "Special credit goes to the workers in Orbiter Processing Facility Bay 1. They produced a quality product in record time."

When marching orders were given, NASA's shuttle and payload communities teamed up to give *Columbia* and the Spacelab payload a speedy turnaround. Once in the Orbiter Processing Facility, replacement of the suspect fuel cell was the first order of business and that was completed the week after landing. Managers then put into motion a strategy that minimized the amount of rework performed on the shuttle and reduced the time required to service the payload.

The ambitious schedule required that all experiment reservicing be done while the Spacelab remained in the shuttle's payload bay. Between flights, Spacelab is normally removed and then transported to the Operations and Checkout Bldg. for rework in a spacious environment. Payload technicians overcame the shuttle's cramped conditions and successfully completed many critical tasks such as replenishing the flammable fluids of a combustion experiment.

"This is the first time that a payload has remained in an orbiter between flights," said Payload Manager Scott Higginbotham. "We are excited about having accomplished something that has never been tried before."

Working side-by-side with the payload team, shuttle technicians and managers faced some challenges of their own. Normally an orbiter visits the Orbiter Processing Facility for about 85 days in preparation for its next launch, but this reflight called for about 56 days in the facility. Managers saved some time by deferring certain routine structural inspections until *Columbia*'s next mission, but other work could not wait and had to be accomplished before launch.

For example, the shuttle's forward reaction control system, located in the nose of the vehicle, had to be removed with three out of sixteen steering thrusters requiring replacement. Also, two of the three 85-pound auxiliary power units that provide hydraulic power to *Columbia*'s flight control systems were replaced having reached their run-time limit between overhauls.

An important part of this time-saving strategy was to minimize the burden on the shuttle processing team.

"Most of the time savings in the OPF was the result of a concerted planning effort between NASA and our contractor partners," said Grant Cates, NASA flow director for *Columbia*. "Once the plan was in place, the team approached this challenge in much the same way that they approach every flow."

To further speed up *Columbia*'s processing for reflight, managers took one main engine scheduled to fly on *Atlantis* in September and two engines from *Columbia*'s November flight. The external fuel tank and solid rocket boosters being used on STS-94 were originally slated for mission STS-85.

Shriver, McMonagle eye shuttle; Harbaugh works space walks

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Harbaugh has extensive background in space walking, having done so during two different shuttle missions, STS-54 and STS-82. Prior to his most recent flight, Harbaugh trained as the backup space walk astronaut for the first servicing mission to the Hubble Space Telescope in 1993.

McMonagle and Harbaugh flew together on STS-39 and STS-54. McMonagle was commander of his third mission, STS-66. Harbaugh also flew on STS-71, the first mission to dock with the Russian Mir Space Station and most recently on the second servicing mission to Hubble, STS-82, in February.

Shriver, a former astronaut, will take over the duties of deputy director of Kennedy Space Center's Launch and Payload Processing, on Aug. 15, but will begin assuming duties of his new position while assuring a smooth transition of his previous duties to his successor.

"With the addition of Loren Shriver to our existing senior staff, I think we have assembled an outstanding management team," said KSC Director Roy Bridges. "Their challenge will be to meet the needs of the agency during the coming years of processing and launching the International Space Station, while preparing the center to help attain the next goals when humankind will learn to work and explore beyond low-Earth orbit."

Shriver will provide executive leadership, strategic planning and direction for KSC's agency-assigned responsibilities as the Center of Excellence for Launch and Payload Processing Systems. This includes payload carriers, space shuttle processing and launch, and processing of payloads including International Space Station elements and responsibilities assigned to the center for expendable launch vehicles.

Shriver has served as launch integration manager since May 1993. A graduate of the Air Force Academy, he participated in development test and evaluation of the F-15 fighter aircraft and the T-38 lead-in fighter. Selected by NASA as an astronaut-candidate in January 1978, Shriver flew three shuttle missions, as pilot of STS-51C and as commander of STS-31 and STS-46.